

Appl. No. 10/774,316
Atty. Docket No. 2004B009
Reply to Office Action of May 4, 2007

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Listing of Claims:

Please amend claim 10 and cancel claims 1, 3-9, 11, 12, and 14-17 without prejudice as follows:

1. (Cancelled)
2. (Previously Presented) A process of manufacturing a blow molded article comprising:
 - (a) blow molding a first composition comprising a first polyethylene into a shaped article;
 - (b) perceiving parison cuffing defects in said process or said blow molded article; and
 - (c) providing to said process a second polyethylene having a lower melt index than said first polyethylene, measured according to ASTM D-1238, and having incorporated therein a small amount of a low molecular weight polyethylene glycol.

Claims 3-9. (Cancelled)

10. (Currently amended) A process of manufacturing a blow molded article comprising:
 - (a) blow molding a first composition comprising a first polyethylene into a shaped article;
 - (b) perceiving parison cuffing defects in said process or said blow molded article; and
The process according to Claim 1, wherein step
 - (c) ~~comprises~~ selecting at least one second polyethylene from HDPE homopolymers having a melt index of from about 0.25 to about 0.80 grams/10 minutes measured according to ASTM D-1238, and having incorporated therein a small amount of a low molecular weight polyethylene glycol and an effective amount of an antioxidant.

Claims 11-12. (Cancelled)

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13. (Previously Presented) A method of reducing cuffing in the blow molding of a composition comprising HDPE, said method comprising incorporating a small amount of a low molecular weight polyethylene glycol in said composition prior to blow molding to provide a new composition and then blow molding said new composition, wherein said new composition does not contain a fluorocarbon polymer, phosphate, or stearate.

Claims 14-17. (Cancelled)

18. (Previously Presented) A method of manufacturing a blow molded article comprising the steps of:

- a. providing a first HDPE having a first melt index in a blow molding process and blow molding said first HDPE into an article;
- b. detecting unacceptable cuffing in said process;
- c. transitioning from said first HDPE in said process to a composition comprising a second HDPE having a second melt index and having incorporated therein a small amount of a low molecular weight polyethylene glycol, wherein said second melt index is lower than said first melt index, measured according to ASTM D-1238; and
- d. blow molding the composition comprising said second HDPE into an article.

19. (Original) The method according to Claim 18, wherein said second HDPE has a melt index of from about 0.25 to about 0.80 grams/10 minutes measured according to ASTM D-1238.

20. (Previously Presented) The method according to Claim 18, wherein said composition does not contain a fluorocarbon polymer, phosphite or stearate.

21. (Previously Presented) The method according to Claim 18, wherein said composition further comprises an antioxidant selected from hindered phenolics.

22. (Previously Presented) The method according to Claim 18, wherein said composition consists essentially of HDPE, polyethylene glycol, and an antioxidant selected from hindered phenolics.

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23. (Previously Presented) The method according to Claim 18, wherein said polyethylene glycol is PEG-400.
24. (Previously Presented) The method according to Claim 18, wherein the composition comprises about 400 ppm to about 1200 ppm of the polyethylene glycol based on the weight of the composition.
25. (Previously Presented) The process according to Claim 2, wherein the amount of polyethylene glycol provided to said process is from about 400 ppm to about 2000 ppm based on the weight of said composition.
26. (Previously Presented) The process according to Claim 25, wherein the amount of polyethylene glycol added is from about 400 ppm to about 1200 ppm based on the weight of the composition.
27. (Previously Presented) The process according to Claim 25, wherein the amount of polyethylene glycol added to the composition is from about 400 ppm to about 1100 ppm based on the weight of said composition.
28. (Previously Presented) The process according to Claim 25, wherein the amount of polyethylene glycol added is from about 400 ppm to about 800 ppm, based on the weight of said composition.
29. (Previously Presented) The process according to Claim 25, wherein the amount of polyethylene glycol added is from about 400 ppm to about 700 ppm, based on the weight of said composition.
30. (Previously Presented) The process according to Claim 2, wherein the polyethylene glycol has a molecular weight of from about 300 to about 500.
31. (Previously Presented) The process according to Claim 2, wherein the second polyethylene is selected from HDPE homopolymers having a melt index of from about 0.25 to about 0.80 grams/10 minutes, measured according to ASTM D-1238.

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32. (Previously Presented) The process according to Claim 2, wherein the second polyethylene is selected from HDPE homopolymers having a melt index of from about 0.25 to about 0.80 grams/10 minutes measured according to ASTM D-1238, and having incorporated therein a small amount of a low molecular weight polyethylene glycol and an effective amount of an antioxidant.

33. (Previously Presented) The method according to Claim 13, wherein said polyethylene glycol is present in the amount of from about 400 ppm to about 1200 ppm based on the weight of the new composition.

34. (Previously Presented) The method according to Claim 13, wherein said new composition further comprises an antioxidant selected from hindered phenolics.

35. (Previously Presented) The method according to Claim 13, wherein said new composition consists essentially of HDPE, polyethylene glycol, and an antioxidant selected from hindered phenolics.

36. (Previously Presented) The method according to Claim 13, wherein said polyethylene glycol is PEG-400.

37. (Previously Presented) The method according to Claim 13, wherein said new composition comprises HDPE homopolymer having a melt index range of from about 0.25 to about 0.85 grams/10 minutes according to ASTM D-1238.